WHAT IS CLAIMED IS:

1. A method for reducing multi-cell signal interferences in a wireless communication network, the method comprising:

dividing an available frequency spectrum into a plurality of channels;

segregating a first wireless communication coverage unit into a first number of geographical segments;

grouping the channels into a second number of channel blocks;

assigning each channel block to at least one of the segregated geographical segments with predetermined priorities; and

repeating the above steps for each neighboring wireless communication coverage unit of the first wireless communication coverage unit,

wherein the channels in different channel blocks exhibit no higher mutual interference than the channels in the same channel block, and wherein the channel block assigned for each segregated segment of the first wireless communication coverage unit is different from the channel block assigned for the segregated segment of a second wireless communication coverage unit that immediately borders with the segregated segment of the first wireless coverage unit even if the first and second wireless communication coverage units share the same frequency spectrum.

2. The method of claim 1 wherein the step of assigning further includes assigning the channel blocks to the geographical segments such that the channel blocks having a higher likelihood of mutual interference are separated farther apart to minimize the multi-cell signal interferences.

3. The method of claim 1 wherein the step of segregating further includes radially segregating the first wireless communication coverage unit into a plurality of sectors or segments.

4. The method of claim 1 wherein the step of segregating further includes segregating the first wireless communication coverage unit into a plurality of co-centric nested polygon or nested ring areas around the center of the wireless communication coverage unit.

5. The method of claim 1 wherein the step of segregating further includes segregating the first wireless communication coverage unit into a plurality of sectors around the center of the first wireless communication coverage unit.

6. The method of claim 5 wherein each of the sectors is further divided radially into a plurality of segments of a predetermined polygon shape.

7. The method of claim 1 wherein the step of grouping further includes assigning one or more subcarriers to each channel block.

8. The method of claim 7 wherein the subcarriers assigned to each channel block are contiguous.

9. The method of claim 1 wherein the step of grouping further includes assigning one or multiple time slots to each channel block.

10. The method of claim 1 wherein the step of grouping further includes assigning one or multiple code channels to each channel block.

11. The method of claim 1 wherein the step of grouping further includes assigning all the code channels in one or more contiguous subcarriers to one channel block in a multiple carrier code division multiple access system.

12. The method of claim 1 further comprising detecting a location of a wireless terminal entering the first wireless communication coverage unit.

13. The method of claim 12 wherein the step of detecting further includes utilizing one or more segregated access code channels (ACCs) for the segregated geographical segments of the first wireless communication coverage unit to identify the wireless terminal wherein the ACCs and the segments bear a one-to-one relationship.

14. The method of claim 12 wherein the step of detecting further includes utilizing a plurality of antennas for the first wireless communication coverage unit to identify the wireless terminal, each antenna pointing to and covering a segregated geographical segment.

15. The method of claim 12 wherein the step of detecting further includes utilizing an adaptive antenna array for the wireless communication coverage unit, wherein at least one ACC physical attribute of the adaptive antenna array is unique to each geographical segment.

16. The method of claim 12 wherein the step of detecting further includes utilizing an exclusive antenna with an exclusive antenna pattern for covering each geographical segment.

17. The method of claim 12 wherein the step of detecting further includes using a direction of arrival of a signal sent by the wireless terminal based on one or more magnitudes and phases of the signal received by one or more antennas for identifying the location of the wireless terminal.

18. The method of claim 12 wherein the step of detecting further includes utilizing a path loss between a base station transceiver unit and the wireless terminal for estimating the distance of the wireless terminal to the base station transceiver unit.

19. A method for reducing multi-frequency signal interference in a wireless communication network, the network having a plurality of cells bordering on each other, each cell using a predetermined frequency spectrum for communications therein, the method comprising:

segregating a first cell into a first number of geographical segments;

dividing the predetermined frequency spectrum for the first cell into a plurality of channels;

establishing a channel assignment priority hierarchy for associating one or more channels to each geographical segment of the first cell;

repeating the above three steps for each cell bordering with the first cell; and

assigning channels to a terminal entering a segregated geographical segment of the first cell according to the established channel assignment priority hierarchy,

wherein the channel assignment priority hierarchy for the first cell and its bordering cells assures that the assigned channels are selected from the channels associated with the geographical segment of the first cell in which the terminal locates, and wherein the channels for such a geographical segment are different from the channels of a similarly segregated segment of another wireless cell that immediately borders therewith.

20. The method of claim 19 wherein the step of establishing further includes:

dividing the frequency spectrum into a plurality of channels;

grouping the channels into a second number of channel blocks; and

prioritizing the channel blocks for servicing each geographical segment based on channel assignment information of neighboring cells of the first cell.

21. The method of claim 20 wherein the channel assignment information is information for frequency channels used for a geographical segment of a second cell bordering on the geographical segment of the first cell.

22. The method of claim 19 further comprising detecting the location of the terminal entering the first cell.

23. The method of claim 22 wherein the step of detecting further includes using segregated access code channels (ACCs) for different geographical segments of the first cell in order to identify the terminal.

24. The method of claim 22 wherein the step of detecting further includes using a plurality of antennas for the first cell, each pointing to and covering a segregated geographical segment.

25. The method of claim 22 wherein the step of detecting further includes using an adaptive antenna array for the wireless communication coverage unit, wherein at least one ACC physical attribute is distinctive for each geographical segment.

26. The method of claim 22 wherein the step of detecting further includes using an exclusive antenna with an exclusive receive pattern for covering each geographical segment.

27. The method of claim 22 wherein the step of detecting further includes using a direction of arrival of a signal from the terminal for identifying the location of the terminal.

28. The method of claim 22 wherein the step of detecting further includes calculating a path loss between a base station transceiver and the terminal for identifying the location of the terminal.

29. A base station transceiver system for reducing multi-cell signal interferences in a wireless communication network, comprising:

means for dividing an available frequency spectrum into a plurality of channels;

means for segregating a first wireless communication coverage unit into a first number of geographical segments;

means for grouping the channels into the first number of channel blocks; and

means for assigning each channel block to at least one of the segregated geographical segments with predetermined priorities,

wherein the channels in different channel blocks exhibit no higher mutual interference than the channels in the same channel block, and wherein the channel block assigned for each segregated segment of the first wireless communication coverage unit is different from the channel block assigned for the segregated segment of a second wireless communication coverage unit that immediately borders with the segregated segment of the first wireless coverage unit even if the first and second wireless communication coverage units share the same frequency spectrum.

30. The system of claim 29 wherein the means for assigning further includes means for assigning the channel blocks to the geographical segments with different priorities such that the multi-cell interference is reduced.

31. The system of claim 29 wherein the means for segregating further includes means for segregating the first wireless communication coverage unit into a plurality of sectors of co-centric circular or polygon areas.

32. The system of claim 29 wherein the means for segregating further includes means for segregating the first wireless communication coverage unit into a plurality of sectors around the center of the first wireless communication coverage unit.

33. The system of claim 29 wherein the means for segregating further includes means for radially segregating the first wireless communication coverage unit into a plurality of sectors.

34. The system of claim 33 wherein each of the sectors is further divided radially into a plurality of segments of one or more polygon shapes.

35. The system of claim 29 wherein the means for grouping further includes means for assigning one or more subcarriers to each channel block.

36. The system of claim 35 wherein the subcarriers assigned to each channel block are contiguous.

37. The system of claim 29 wherein the means for grouping further includes means for assigning one or multiple time slots to each channel block.

38. The system of claim 29 wherein the means for grouping further includes means for assigning one or multiple code channels to each channel block.

39. The system of claim 29 wherein the means for grouping further includes means for assigning all the code channels in one or multiple of contiguous subcarriers to one channel block in a multiple carrier code division multiple access system.

40. The system of claim 29 further comprising means for detecting a location of a wireless terminal entering the first wireless communication coverage unit.

41. The system of claim 40 wherein the means for detecting further includes means for utilizing one or more segregated access code channels (ACCs) for the segregated geographical segments of the first wireless communication coverage unit to identify the wireless terminal wherein the ACCs and the segments bear a one-to-one relationship.

42. The system of claim 40 wherein the means for detecting further includes means for utilizing a plurality of antennas for the first wireless communication coverage unit to identify the wireless terminal, each antenna pointing to and covering a segregated geographical segment.

43. The system of claim 40 wherein the means for detecting further includes means for utilizing an adaptive antenna array for the wireless communication coverage unit, wherein at least one ACC physical attribute of the adaptive antenna array is unique to each geographical segment.

44. The system of claim 40 wherein the means for detecting further includes means for utilizing an exclusive antenna with an exclusive antenna pattern for covering each geographical segment.

45. The system of claim 40 wherein the means for detecting further includes means for using a direction of arrival of a signal sent by the wireless terminal based on one or more magnitudes and phases of the signal received by one or more antennas for identifying the location of the wireless terminal.

46. The system of claim 40 wherein the means for detecting further includes means for utilizing a path loss between a base station transceiver unit and the wireless terminal for estimating the distance of the wireless terminal to the base station transceiver unit.